5

10

ABSTRACT

Methods and apparatus for dynamically compiling byte codes associated with methods during idle periods in the execution of a computer program are disclosed. The described methods are particularly suitable for use in computer systems that are arranged to execute both interpreted and compiled byte codes. In some embodiments, methods to be dynamically compiled are referenced in one or more lists. The lists may be prioritized to facilitate the compilation of the highest priority methods first. In one embodiment, a pair of compilation lists are provided with a first one of the compilation lists being created prior to processing the computer program while the other is created during the processing of the computer program.